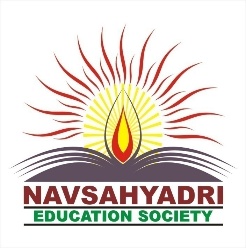
**NAVSAHYADRI EDUCATION SOCIETY’S,**



**GROUP OF INSTITUTIONS**

**DEPARTMENT OF COMPUTER ENGG.**

**ACADEMIC YEAR: 2019-20 SEMESTER-II**

**Microprocessor Lab**

**Class:** SE Computer **Examination Scheme:** Online Exam: 50 Marks

**Teaching Scheme:** TH: 04 Hrs/Week **End-Sem (Paper):** 50 Marks

PR: 04 Hrs/Week

**List of Laboratory Experiments**

|  |  |  |  |
| --- | --- | --- | --- |
| **Practical No** | **Title of Experiment** | **Can be Performed** | **Ramark** |
| **1** | Write X86/64 ALP to print “HELLO” message. | Yes | NIL |
| **2** | Write X86/64 ALP to count number of positive and negative numbers from the array | Yes | NIL |
| **3** | Write X86/64 ALP to perform non-overlapped and overlapped block transfer . | Yes | NIL |
| **4** | Write X86/64 ALP to convert 4-digit Hex number into its equivalent BCD number and 5-digit BCD number into its equivalent HEX number. | Yes | NIL |
| **5** | Write X86/64 ALP to perform multiplication of two 8-bit hexadecimal numbers. Use successive addition and add and shift method | Yes | NIL |
| **6** | Write X86 ALP to find, a) Number of Blank spaces b) Number of lines c) Occurrence of a particular character. Accept the data from the text file | Yes | NIL |
| **7** | Write X86/64 ALP to switch from real mode to protected mode and display the values of GDTR, LDTR, IDTR, TR and MSW Registers | Yes | NIL |
| **8** | Write X86 program to sort the list of integers in ascending/descending order. Read the input from the text file and write the sorted data back to the same text file using bubble sort | Yes | NIL |
| **9** | Write x86 ALP to find the factorial of a given integer number on a command line by using recursion. Explicit stack manipulation is expected in the code. | Yes | NIL |
| **10** | Write 80387 ALP to find the roots of the quadratic equation. All the possible cases must be considered in calculating the roots | Yes | NIL |
| **11** | Write 80387 ALP to plot Sine Wave, Cosine Wave and Sinc function. Access video memory directly for plotting. | Yes | NIL |
| **12** | Write 80387 ALP to obtain: i) Mean ii) Variance iii) Standard Deviation Also plot the histogram for the data set. The data elements are available in a text file | Yes | NIL |